DISCUSSION ON DVB-I SERVICES

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BACKGROUND

DVB decided to start work on low-latency DASH in the commercial modules

A DVB CM-AVC LL-DASH activity is tasked to create commercial requirements for consistent delivery of live TV programs over DVB-DASH such that the quality matches distribution of other DVB distribution means and provides additional functionalities by the use of a unicast based delivery of TV services.

This means that with the development of this specification, linear DVB channels can be distributed w/o any compromise on quality also over the open Internet.

As part of the use cases, the program line-up of live channels was discussed.

However, this is not possible today

BEYOND LOW-LATENCY

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New use case:

- A consumer buys a TV Set in the retail store and connects it to Ethernet/WiFi
- It finds in the configuration whether an Broadband TV channel lineup should be created (DVB-I services)
- It selects it and the TV set adds the Broadband channels in the channel lineup as DVB services
- Such services are accessed by an MPD pointing to a DASH profile
- The consumer does not differentiate whether the channel comes through broadband or other DVB means
- The consumer observes the same quality in terms of latency and channel line-up
- The consumer can get new experiences on these channels

If low-latency is addressed anyways, a basic service layer may be beneficial taking into account modern web architectures such as RESTful APIs, dynamic network configurations, media clouds, etc.

Such a simple service layer may benefit also usage on non-TV Sets, such as mobile phones

It is accepted that technologies already exist, and that there proprietary solutions. Also the beyond TS study mission and the ABR multicast has discussed this issue

WHY NOW?

A couple of factors speak for doing such an effort now

1. If DVB-DASH can provide proper live experience, a full channel line-up should be done
2. The ABR multicast needs to have such functionalities to create DVB services
3. The aggregation of DVB services in non-TV devices (as defined now by CM-AVC) is as relevant nowadays as it is on TV Sets
4. Very scalable web architectures exist that permit integration of service discovery into different environments (mobile apps, browsers, smart TV apps, etc.)
5. The availability of such a layer would enable a very soft translation towards IP-based services similar to what is done in ATSC w/o distracting install base of TV sets and networks
6. Such a simple service layer permits DVB services to be used on top of for example 5G networks including LTE Broadcast w/o any problems.

HOW?

1. Evolutionary – not radical
2. Plan for simple things – small enablers rather full systems
3. Do a short study (until the next CM)
   a) Collect some simple use cases
   b) Check existing technologies and specs
   c) Create the interest for doing this among DVB members
   d) Reach out to other organizations
   e) Web-based …
   f) Decide at the next CM if a commercial requirements work is started

SUPPORTING MEMBERS